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ARE OUR PATENT LAWS INIQUITOUS?

BY THE HON. W. E. SIMONDS, EX-COMMISSIONER OF PATENTS.

IS IT wrong in itself or hurtful to the national prosperity for the grain-raisers of the West to plant the seed and till the ground? Is it wrong to permit those grain-raisers to own and sell the products of their toil? These two questions are less unreasonable than the one which heads this article.

The inventor holds his property by two distinct and impregnable titles. It is his because of his natural right to it, and also because the public welfare—formulating its need and will in the Constitution and statutes—demands that it shall be his. Various kinds of natural rights exist independently of statute, because they are instinctively recognized by all men who are wholly sane. Our Declaration ot Independence is explicitly based upon natural rights. Its second sentence is this: "We hold these truths to be self evident: That all men are created equal; that they are endowed by their Creator with certain unalienable rights; that among these are life, liberty and the pursuit of happiness." The "pursuit of happiness' meant in large part the undisturbed possession of property; the colonies were suffering from "taxation without representation." Among other natural rights, Blackstone catalogues the natural right of property thus: "The third absolute right inherent in every Englishman is that of property."

This recognition of natural right in property is not confined to civilization; if an Indian fashions a bow from a sapling that he cuts, or a garment from the skin of a beast that he kills, his fellows instinctively recognize his right of property therein. Anything capable of reduction to possession and having value in exchange is property-subject-matter. No higher title to an exclusive right in an article of property is imaginable than that which springs from making it out of materials belonging to no one else. An invention is the visible expression of a mental conception; it is capable of reduction to possession, and has value in exchange, wherefore it is property-subject-matter; the inventor makes it out of materials belonging to no one else, wherefore it is his property by natural right and by the high title of creation.

Let us pause to understand what the possession of the invention means. The invention is the visible expression of a mental conception; its value does not reside in the intrinsic worth of the wood, or iron, or brass by the use of which the mental conception is made manifest; it resides in the visible expression of the mental conception itself; the inventor must have dominion of that: no one must be permitted to appropriate the inventor's idea without his consent; otherwise he does not retain possession of his invention.

The inventor's property is not a monopoly in any other sense than is the ownership of a house. Blackstone properly defines monopoly as "a license or privilege whereby the public in general is restricted from the liberty of manufacturing or trading which he had before." The inventor does not deprive his fellow man of any right he had before. His invention, in order to be an invention, must be something new. A patent can only be had for something new. Monopoly works a deprivation to the public. Invention adds to the stock of public possessions.

So much for an inventor's title to his property as a matter of natural right. Now as to his ownership "because the public welfare demands that it shall be his." It was precisely on that ground that the builders of the Constitution authorized the granting of patents. They were seeking to benefit the public, not to reward inventors. Their motive was enlightened selfishness. "In order to promote the progress of science and useful arts" they authorized Congress "to secure for limited times to authors and inventors the exclusive right to their respective writings and discoveries." The first Congress enacted a patent law in 1790, and there has been one ever since. The first year there were three patents granted; the last year, 1892, there were forty thousand applied for, twenty-three thousand granted, and the revenue therefrom was more than $1,200,000, being $175,000 in excess of expenses, which was added to the $4,000,000 already in the treasury to the credit of the Patent Office. Numerically and financially our patent law is beyond question a success.

Has it promoted the progress of science and the useful arts? The growth of our manufactures is the marvel of the ages, and the percentage thereof not originally based upon, or at some time vigorously stimulated by, some invention recorded in the Patent Office is a small one. The following are a few and only a few of the American inventors whose reputation has become national and whose improvements have formed the foundation of manufacturing industries of great magnitude: John Fitch, Robert Fulton, and James Rumsey, as to steamboats; Eli Whitney, as to the cotton-gin; Oliver Evans, as to milling-machinery; Amos Whittemore, Erastus B. Bigelow, and Barton H. Jenks, as to looms; Eli Terry, Ira Ives, Noble Jerome, and Chauncey Jerome, as to clocks; Peter Lorillard, as to tobacco making; E. I. Du Pont de Nemours, as to gunpowder; Jesse Reed, as to nail-making; William Edwards, as to leather-making; Jethro Wood, as to iron plows; Thomas Blanchard, as to lathes for turning irregular forms; Asa Spencer, as to geometrical lathes; Richard M. Hoe, Isaac Adams, Stephen P. Ruggles, Andrew Campbell, Moses S. Beach, and G. P. Gordon, as to printing-presses; Samuel W. Collins and Elisha K. Root, as to axe-making; Oliver Ames, as to shovels; William Woodworth, as to wood-working; Thaddeus Fairbanks, as to scales; John J. Howe and Chauncey O. Crosby, as to pin-making; Eliphalet Nott and Jordon L. Mott, as to stoves; Robert L. and Alexander Stuart, as to sugar-refining; Matthew W. Baldwin and Ross Winans, as to locomotives; Cyrus H. McCormick and William P. Ketchum, as to mowing and reaping; Samuel Colt, Ethan Allen, Christian Sharps, Edmund Maynard, Rollin White, Christopher M. Spencer, Horace Smith, and Daniel P. Wesson, as to fire-arms; Alonzo D. Phillips, as to friction-matches; Henry A. Wells, as to hat-making; Charles Goodyear, Nathaniel Hayward, and Horace H. Day, as to India-rubber; John Ericsson, as to naval construction and hot-air engines; Elias Howe, Jr., Allen B. Wilson, Isaac Singer, J. E. A. Gibbs, William O. Grover, and William E. Baker, as to sewing-machines; S. F. B. Morse, Royal E. House, and David E. Hughes, as to telegraphs; Henry B. Tatham, as to lead pipe; Cullen Whipple, as to wood-screws; Jonas Chickering and Henry Steinway, Jr., as to pianos; Henry Burden, as to horse-shoe machinery; Linus Yale, as to locks; John A. Roebling, as to cables, chains, and bridges; George H. Corliss, as to steam-engines; Asa Whitney and Nathan Washburn, as to car-wheels; Gail Borden, Jr., as to condensed milk; William and Coleman Sellers, as to shafting and iron-working; Henry Disston, as to saws; James J. Mapes, as to fertilizers; John Stephenson, as to horse-cars; R. P. Parrott, as to cannon; Richard J. Gatling, as to Gatling guns.

This list is confined to those inventors whose patents have expired, and whose inventions are now public property. In a short time the list will be augmented by the telephone and the electric light.

This list affords simply a hint of the variety and extent of American inventions. The whole number of patents granted prior to January 1, 1893, was half a million, and the proportion thereof which has been of practical value is vastly larger than the public dreams. Men in general hear only of great inventions, the cotton-gin, the telegraph, the air-brake, the sewing machine, the telephone and the electric light, those which dominate the markets and the mind of the world; they take little note of the tens of thousands of minor inventions, whose aggregated value is far greater than that of the phenomenal improvements which blaze like meteors before the public eye.

In the State of Connecticut lies the Naugatuck Valley, named from the river that courses through it; it is about fifty miles long, with the borough of Winstead at its head, and Long Island Sound at its foot. The valley is cradled between two ranges of barren hillsides; except for slight strips of land along the water course it is hardly worth the settlement. Yet, if a rill of liquid gold ran down the river bed it would not deposit at the valley foot at the year's end so much of wealth as the valley now produces. Boroughs, villages, hamlets and a city are strung along the valley in practical continuity, and all are filled with manufacturing industries built upon patented improvements. The variety of productions would fill a book in their description. Among them are textiles, scythes, edge tools, coffin trimmings, pins, needles, hooks and eyes, clocks, silverware, plated ware, photographic instruments and materials, telegraphic instruments and wire, furniture, miscellaneous hardware, goods of brass and copper in endless variety, and so on. Yankee enterprise, availing itself of patented inventions, has given this barren valley a wealth-producing capacity worthy the envy of Crœsus. And this is only a sample of the instances which are almost countless in the country taken as a whole. It is gratifying to know that this wonder-working influence is operative here and there, even in the sunny South.

The settlement and cultivation of the great West have only been made possible through patented inventions. Banish our agricultural inventions, and the entire population of the United States, men, women and children, would not suffice to raise and care for half of our present crops. It was Whitney's improvements in cotton-gins that made cotton into a king; we produced three billion six hundred and twenty-two million pounds of that staple in 1889, and without patented inventions it would have required the labor of three millions of men for twelve months simply to clean it. In that same year we produced two billion bushels of corn ; destroy patented inventions used in its production, and it would have taken the labor of the twenty-four millions of men and boys that are in the land to plant and harvest it. Meanwhile, where should we have found the labor for the four hundred and ninety million bushels of wheat and the seven hundred and fifty million bushels of oats we raised that year, even if we had managed to do without potatoes and other vegetables ? Under the old order of things the value of each bushel of this grain would have been consumed in carting it from Omaha to Chicago, while now it is carried across a continent and then across an ocean, and still sold at a living profit. Right there it is just as well for the farmer to know that competent persons believe that except for patented improvements in compound marine engines, lessening the cost of ocean transportation, his grain could not to-day be laid down in Europe at a price which would permit him to undersell his foreign competitors.

And now, what is the influence of patents on the fortunes of mechanics ? We should not have had more than half our present manufacturing industries but for patented inventions, nor employment for more than half our present force of manufacturing mechanics. No delusion is more surely a delusion than the somewhat common one that inventions lessen the wages and the numbers of manual laborers. The same kind of mechanics that now gets two dollars and fifty cents per day received not more than one-half that wage in 1843. At the meeting of the American Social Science Association in 1878 a member read a paper to the effect that a single great daily newspaper in New York, using modern machinery, had practically displaced five thousand printers using the press of Benjamin Franklin. He forgot the perfectly apparent fact that the wages of this army, if employed, would so enhance the cost of the paper as to destroy the enterprise. Every calculation like his has the fatal defect of forgetting the sure relation between lessened price and increased consumption. No modern volume of business can be done in the ancient way. It must be done in the new way, or not be done at all.

Possibly the sewing machine is the greatest labor-saving device ever known. It is related of Walter Hunt that in 1838 he had nearly completed his invention thereof; that his wife bewailed its effect upon the fortunes of tailors and seamstresses, and that thereupon he gave it over to forgetfulness. Nevertheless it was introduced into public use between 1850 and 1870. In 1850 there was one tailor to four hundred and forty-two inhabitants; in 1870 there was one tailor to three hundred and fifty-eight inhabitants; in that twenty years population increased sixty-five per cent., but the number of tailors had increased more than one hundred per cent. Meanwhile the manufacture and sale of sewing machines gave employment to many thousands of mechanics, and millions of the machines went into use in factories and families. The locomotive is another great labor-saver, which was made common in America between 1850 and 1870, but while in those two decades population increased sixty-five per cent. the makers of carriages and wagons increased more than two hundred per cent.

The plea of him who objects to patents, when plainly stated, is that inventors invent, as birds sing, because they must, and if they were not permitted to have the exclusive right for a little time the public could have the use of their improvements from the beginning. Inventors do not invent because they must; they are actuated by the ordinary motives of human nature—they invent for a livelihood and for remuneration. The "must" argument was ventilated before a British parliamentary commission, and a host of inventors, with Bessemer at their head, promptly appeared and put a quietus upon that notion. Take away the inventor's inducement to invent, and you kill the goose that lays the golden egg.

And if it were true that inventors invent, as birds sing, the objector's difficulty would be only half overcome. The patent laws are necessary in order to induce capital to take the risk of commercially developing inventions. If to-day, for the first time, an inventor were to produce the sewing machine, that inventor would hawk it up and down the line in vain to find the foolish capitalist who would risk $200,000 upon its commercial development, with the certainty that success would but invite ruinous competition. The history of American carpet-making is instructive upon this point, and also in showing how inventions reduce prices in the long run. A generation ago our carpets were nearly all made for us by foreign hands, and the prices were excessive; a great American inventor produced the Bigelow carpet loom; two and a-half millions of dollars were ventured upon it by the Lowell and Hartford companies. To-day the prices of carpets are less than half what they were, and we import less than one per cent. of the carpets that we use. Without the patent law, these millions would never have been risked upon this wonderfully fruitful experiment.

That portion of the public which thinks itself aggrieved by the patent system points at four patented improvements out of the half million as specific objects of complaint: barbed wire, driven wells, Bell's telephone and Berliner's improvement thereon. It has no just grievance against the barbed wire patents; that invention has proved of enormous value to the public, especially in treeless regions; the complaint is based upon an unwillingness to allow the inventors a minute remuneration for their contribution to the public weal. The complaint against the driven-well patents should be directed against the pirates who knowingly led innocent users into infringement; those users could have avoided trouble if they had acted with the caution and sagacity they ordinarily used in other business matters. The Bell invention deserved the princely recompense it has received; it will be open to the public after January 30, 1894. The complaint in the Berliner case is that the application for the patent was delayed for a long term of years in the Patent Office, during which it should have been running towards expiration. The patent laws were not at fault; they were *abused*. Let the abuse be brought home to the right party, in the suit now pending to repeal that patent. Let us add to the patent laws in two particulars: First, by providing that no innocent user of a patented "manufacture" or "composition of matter" shall be sued for infringement so long as the maker or seller can be reached; and, Second, by providing that a patent shall begin to run not later than three years from and after the first application therefor. But let it never be said that the agency which has been the most potent of any in the development of our magnificent material prosperity is iniquitous.

W. E. SIMONDS.